COSC 201 – Assignment #1
Fall 10

Objective: Write a program that will take in a text filename via the command line. That file will contain a list of books, one per line, formatted **title, author, ISBN, subject, subject specific information**. Your code should open this text file and put it in a database of books. There should be an interface class called Book, and two parent classes (implementing Book) called Fiction and NonFiction. All subjects will be implemented as classes that extend each of these and also include a piece of subject specific information described below.

NonFiction Subjects:	Subject Specific Information:
War	Commanding General
Peace	Number of hippies
Hamsters	How many rotations of the wheel

Fiction Subjects:	
Fantasy	Number of dragons
Jackalopes	Size of antlers in cm (e.g. 5.4)
Physics	Probability of factualness (from 0 to 1)

Books should include private fields for all information from the file as well as anything additional required due to your testing routines (see below).

Expectations: Your code will need to be neat, concise, well documented and above all, correct (see Testing). All classes should have headers and each method should have comments describing the method's function with pre and post conditions. Any novel or possibly confusing code should be explained, as I do get confused and distracted easily.

Design Documents: UML diagrams are due September 24th at the start of class.

Testing: Your driver should open the text file and add books to ArrayLists of each of the subject types. Your driver should then output the number of books in each subject, the number of books in Fiction and in NonFiction and then ask the user for a subject name. Once a subject name is inputted, the driver should output an alphabetical sort of all of the books by title. I will be testing this with variously sized files, including an empty file, no file passed via command line and a file that does not exist. You will need to perform basic error handling, but you can assume that the file is properly formatted.

Grading rubric will be given out at least a week ahead of the due date.

DUE: October 6th, 11:59 pm Eastern.